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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/993,745 | 11/14/2001 | Gerald Chip | GT-5400 | 8255 |

7590 07/13/2005
Omnova Solutions Inc.
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EXAMINER

BOYD, JENNIFER A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1771

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,745

Applicant(s)

CHIP ET AL.

Examiner

Jennifer A. Boyd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 11-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Request for Reconsideration

1. The Applicant's Remarks, filed April 14, 2005, have been entered and have been carefully considered. Claims 1 – 15 are pending and claims 11 – 15 are withdrawn. The invention as currently claimed is unpatentable for reasons herein below.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. Claims 1 - 10 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The details of the rejection can be found in paragraph 3 of the previous Office Action dated January 13, 2005. The rejection is maintained.

Claim Rejections - 35 USC § 103

4. Claims 1 – 10 remain rejected under 35 U.S.C. 103(a) as being unpatentable over O'Connor et al. (US 4,539,254). The details of the rejection can be found in paragraph 5 of the Office Action dated January 13, 2005. The rejection is maintained.

Response to Arguments

5. Applicant's arguments filed April 14, 2005 have been fully considered but they are not persuasive.

Applicant argues that claims 1 – 10 satisfy 112, first paragraph irrespective of the fact that the amount of short stop agent added to the UF resin is not disclosed. It should be noted that the Applicant has not provided any chain length limitations to the urea-formaldehyde polymer (i.e. a normal urea-formaldehyde polymer compared to urea-formaldehyde polymer made by adding a shortstop agent), the amount of shortstop agent used in the system and the time at which the short stop agent is put into the urea-formaldehyde system. The Examiner agrees that the amount of short stop agent added to the system and the predetermined time the short stop agent is added would materially affect the properties of the final product. However, by providing no specific value or range for the amount of short-stop agent added, the Examiner can assume that even minute amount of short stop agent would meet the claim limitations. Furthermore, the Applicant has not claimed any desired properties that would imply a certain amount of short stop agent added and a predetermined time at which it was added. The Examiner submits that it would not be obvious to one of ordinary skill in the art to know how much short stop agent to add or when to add it because the nature of the final product of the Applicant is unknown. The rejection is maintained.

Applicant argues that the Examiner has not met the burden of presenting a prima facie case of equivalence between the resin of O'Connor and the short-stopped UF resin of the present Application. As stated in the applied rejection, O'Connor teaches a composite comprising at least one layer of fiberglass, at least one layer of polyester and at least one third layer which is fiberglass or polyester (column 1, lines 59 – 64). It should be noted that that the layer of polyester can be equated to Applicant's "single layer of a nonwoven or woven polyester mat". O'Connor teaches that the layers may be bonded together by a thermoplastic adhesive under

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pressure to form a thin composite (column 2, lines 10 – 14). O'Connor teaches that the thermoplastic adhesive used to bind the laminated composite together can be a water-based adhesive capable of cross-linking (implying the need of a cross-linking material) to give a thermoset structure, may also be made by adding thermosetting resins to a thermoplastic resin (for example, by adding a urea-formaldehyde resin to a styrene-butadiene latex) (column 3, lines 55 – 68). Due to the fact that the Applicant has not provided a required range of short-stop added to the system, the Examiner can assume that even a minor amount of short-stop agent would meet Applicant's requirement. The Examiner submits that a minor amount of shortstop agent could be added towards the polymerization process which would result in a minimal impact on the structural and physical characteristics of the polymer. Based on the limited information that is provided, the Examiner has shown reasonable rationale to show that the claimed product appears to be the same or similar to that of the prior art. The burden remains shifted to the Applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). It should be noted that the Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Furthermore, it should be noted that "The lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art

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discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972). The rejection is maintained.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer Boyd
July 9, 2005


Ula C. Ruddock
Primary Examiner
Tech Center 1700